

AMENDMENTS TO THE CLAIMS

The following is a complete, marked-up listing of revised claims with a status identifier in parenthesis, underlined text indicating insertions, and strike through and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A high-density read-only optical disc including a Lead-In area, a data area, and a Lead-Out area, comprising:

the Lead-In area including a specific area having a bi-phased High Frequency Modulated (HFM) groove and a fixed pattern of straight pits formed along the HFM groove straight pit-shaped line created by repeated marks and spaces such that the same tracking servo operation can be successively performed over the whole data area of the disc[[],]

~~wherein either one of the mark or the space is recorded with a minimum pit length at least as small as 2T.~~

2. (Original) The disc as set forth in claim 1, wherein the specific area contains principal information of the high-density read-only optical disc.

3. (Previously Presented) The disc as set forth in claim 1, wherein the specific area is an area that would correspond in a high-density rewritable optical disc to a PIC (Permanent Information & Control data) area, for permanently storing principal disc information.

4. (Original) The disc as set forth in claim 3, wherein the high-density read-only optical disc is a BD-ROM (Blu-ray Disc ROM), and the high-density rewritable optical disc is a BD-RE (Blu-ray Disc Rewritable).

5. (Original) The disc as set forth in claim 1, wherein the mark and the space are repeatedly recorded in a predetermined recording period with different unique pit lengths according to a data value representing the recording period.

6. (Original) The disc as set forth in claim 5, wherein sum of pit lengths of each pair of the mark and the space is constant, irrespective of a representative data value of the recording period.

7. (Currently Amended) A method for reproducing data stored in an optical recording medium, comprising the steps of:

a) reading, via a same servo operation as is usable to read data recorded in a user information area, data recorded in a Lead-In area in the form of straight pre-pits having a ~~minimum pit length at least as small as 2T~~ fixed pattern and associated with a bi-phased HFM (High Frequency Modulated) groove, wherein the fixed pattern of the straight pre-pits is formed along the HFM groove; and

b) reproducing data recorded in the user information area by referring to the read data.

8. – 9. (Cancelled)

10. (Previously Presented) The method as set forth in one of claim 7, wherein the servo operation is a DPD (Differential Phase Detection) method.

11. – 15. (Cancelled)

16. (Currently Amended) An apparatus for reproducing data stored in an optical recording medium, comprising:

~~a servo unit for reading~~ a reproducing device adapted to read data recorded in a Lead-In area in the form of straight pre-pits having a ~~minimum pit length at least as small as 2T~~ fixed pattern and associated with a bi-phased HFM (High Frequency Modulated) groove, and ~~reading~~ read data using the same operation as used in the Lead-In area to read data recorded in a user information area in the form of straight pre-pits by referring to the data read from the Lead-In area, wherein the fixed pattern of the straight pre-pits is formed along the HFM groove; and

~~a controller adapted to control the reproducing device~~ ~~control unit for controlling the~~ servo unit.

17. (New) The apparatus of claim 16, wherein the reproducing device includes an optical pickup unit configured to read the data recorded in a Lead-In area and read the data recorded in a user information area and a servo unit configured to drive the optical pickup unit.

18. (New) The apparatus of claim 17, wherein the servo unit is configured to perform a servo operation by a Differential Phase Detection (DPD) method.

<End of Claims Listing>